The World of Extraction

ESTA

OPERATING INSTRUCTIONS

EUROSOG

Industrial Vacuum Cleaners

The World of Extraction ESTA

Welcome to the sphere of suction technology

Your purchase of an **ESTA** machine has been a good decision. The design of our quality products complies with the latest state of the art. **ESTA** products have been devised to provide for clean air at the workplaces at which they are applied. This results in an even more enhanced level of quality and longer machine times and, particularly, healthier working conditions. Should you have any questions pertaining to suction technology issues, please feel free to contact us at any time. Our experts will be gladly at your disposal.

Your **ESTA Absaugtechnik** Team

www.esta.com

Operating manual

EUROSOG

Item No. 80.198 (EUROSOG-W/N)
Item No. 81.198 (EUROSOG-I-D/N)

Item No. 80.399 (EUROSOG-W/M)
Item No. 81.399 (EUROSOG-I-D/M)

Item No. 80.299 (EUROSOG-W/H)
Item No. 81.299 (EUROSOG-I-D/H)

Do not use this device unless you have
read the user manual and understand it.

Translation of the original operating manual
80198-08-03

Edition notice

Original operating manual
Document No.: 80198-08-03
Publishing date: 23.08.2016

Type of device: EUROSOG industrial vacuum cleaner
Item No.: 80.198 // 81.198 // 80.399 // 81.399 // 80.299 // 81.299 and variants

Publisher

ESTA Apparatebau GmbH & Co. KG
Gotenstraße 2-6
89250 Senden
Germany

Tel.: +49 (0) 73 07 80 4 -0
Fax: +49 (0) 73 07 80 4 -500
E-mail: info@esta.com
www.esta.com

Copyright notice (per DIN ISO 16016:2007-12)


Warnings and safety instructions


Electrical current hazard


Note


Reference to ESTA customer service


Reference to legal regulations

Contents

1. General safety notes

Before operation, all persons who are to use the device or perform maintenance on it must be provided with information, instructions and training in using the device and on the substances for which it is to be used, including the procedure for safe disposal of the collected material. Responsibilities must be clearly established for the following:

- **Installation**
- **Start-up**
- **Operation**
- **Maintenance and repair**

The device must be used only by persons who have been instructed in its handling and are explicitly authorized to use it.

Always keep the operating manual at the place where the industrial vacuum cleaner is being used, so that it can be seen by personnel at all times.

The device must not be used by people (including children) with limited physical, sensory or mental abilities or who lack experience and/or knowledge, unless they are supervised by a person who is responsible for their safety or have received instructions on how to use the device properly. Children must be supervised to ensure that they do not play with the device.

The device is intended only for dry cleaning of coarse, fine and free-flowing dusts and must not be used or stored outdoors or under wet conditions.

No liquids, aggressive gases, easily flammable materials or glowing particles (such as hot embers) may be aspirated.

Installation and operation in dust-explosive or gas-explosive areas is forbidden.

Only original ESTA replacement parts must be used; use of other products will void the warranty.

During exhaust, the volume flow returned from the device into the room must be no more than 50% of incoming air. With free room ventilation, the incoming airflow must equal the room volume every hour. This means that the rate of air replacement must be once per hour.

$$\text{Incoming airflow } [m^3/h] = \text{room volume } [m^3] * \text{air replacement rate } [1/h]$$

Example:
When the ESTA industrial vacuum cleaner is operating at the nominal airflow volume of 360 m³/h, the same volume of fresh air must therefore be fed in. This occurs with natural ventilation if the volume of the work room is 360 m³ (e.g., 150 m² surface with a 2.4 m ceiling height).

Make sure that the power cable does not become damaged by being run over, compressed, pulled, etc.

The power cable must be examined regularly for signs of damage or ageing.

The device must not be used if damage to the power cable is detected.

The power cable and plug must be replaced only by an appropriately trained electrical specialist.

For the power supply and the device's power cords, only original ESTA replacement parts must be used. This guarantees that they are spray-proof according to applicable standards and have the necessary mechanical strength.

The power cord must be plugged in only after the industrial vacuum has been successfully set up at its place of use. For this, with a three-phase unit a 16-amp CEE wall socket must be in place, or with an AC unit, a 16 A Schuko wall socket with a slow-blow fuse.

After use, before moving the device to another site and before cleaning, maintenance, or replacement or removal of movable parts, the device must be unplugged.
To prevent dust release when transporting the device, the intake port must be closed with the sealing plug.

The EUROSOG is to be moved on a stable, even surface that can securely support a weight of 150 kg/m².

Cleaned air from the EUROSOG must be returned only to work areas from which it was exhausted.

Only original ESTA conductive accessories may be used for operating the industrial vacuum.

From its first use, the device contains toxic dust. Emptying and maintenance processes, including removal of the dust collection container, must be performed by expert personnel who are wearing appropriate protective gear. The device must not be operated without the complete filtration system!

According to directives 2009/104/EC and TRGS 560, safety devices for prevention or removal of hazards must be regularly maintained and regularly inspected by an expert for safe, flawless operation.

In all emergencies, the device must be disconnected from the power supply immediately. Turn the device off with the emergency switch and pull the plug. If there is a fire, the fire department is to be alerted immediately, and the fire must be contained by appropriate means! A suitable extinguishing agent must be kept near the device before start-up and during operation.

2. Preventing mechanical hazards

All movable machine parts driven by electric motors must be covered by fixed, securely fastened protective covers that can be removed only with tools.

Residual risk:
If a covering that can only be unfastened with a tool is removed, there is risk of injury if the machine is running.

3. Preventing electrical hazards

All electrical parts must be covered by fixed, securely fastened protective covers that can be removed only with tools. The device complies with Protection Class I according to EN 60 335.

Residual risk:
If a covering that can only be unfastened with tools is removed, a hazard is posed by electric current.

4. Preventing dust hazards

Using a one-way dust collection bag with a closable opening guarantees low-dust removal of the collected dust material.

Residual risk:
When emptying the dust collection bag, it is possible to inhale dust.

4.1 Devices for dust class M (EUROSOG-I-D/M, EUROSOG-W/M)

The device is designed for use with dusts that are hazardous to health. When working on the open device (for maintenance, cleaning, repairs), the operator must take special protective measures, which include wearing special personal protective gear. When the device is being operated, the complete filtration system, consisting of the main filter and backup filter must be used. The following warning is shown on the device.

After the first time it is operated, this device contains class M dust (moderately hazardous). The instructions contained in the operating manual for low-dust cleaning, service, maintenance and disposal absolutely must be followed. Open the device only when it has been turned off from the control panel, and when it has been determined by a wait time of about 4 minutes that the filter cleaning process has been performed and that the dust inside the device has settled in the dust collection container. Before opening, turn the device off at the main switch and secure it against unintentional reactivation. Using a one-way dust collection bag with a closable opening guarantees low-dust removal of the collected material.

4.2 Devices for dust class H (EUROSOG-I-D/H, EUROSOG-W/H)

The device is designed for use with dusts that are hazardous to health. When working on the open device (for maintenance, cleaning, repairs), the operator must take special protective measures, which include wearing special personal protective gear. When the device is being operated, the complete filtration system, consisting of the main filter and backup filter must be used. The following warning is shown on the device.

Open the device only when it has been turned off from the control panel, and when it has been determined by a wait time of about 4 minutes that the cleaning process has been performed and that the dust inside the device has settled in the dust collection container. Before opening, turn the device off at the main switch and secure it against unintentional reactivation. Using a one-way dust collection bag with a closable opening guarantees low-dust disposal of the collected material.

5. Intended use

The ESTA industrial vacuum has been manufactured according to the state of the art and in compliance with safety regulations. It is suitable for commercial use, such as in industrial firms and workshops.

ESTA **EUROSOG-I-D/N, EUROSOG-W/N** model devices (all variants) are equipped with a filter for **dust class "M"** (moderate hazard) for separation of dust with an exposure limit > 0.1 mg/m³. The purified air can be directed back into the work area. These devices are suitable for removal of non-flammable, dry, coarse, fine and free-flowing dusts that are not toxic. This design is not suitable for exhausting processing machines.

The **EUROSOG-I-D/M, EUROSOG-W/M** is additionally tested based on standard EN 60355-2-69 Appendix AA for **dust class "M"** (moderate risk) by the TÜV PRODUCT SERVICE.

The **EUROSOG-I-D/H, EUROSOG-W/H** is tested based on standard EN 60335-2-69 Appendix AA for **dust class "H"** (high risk) and is suitable for separation of any dry, non-flammable dusts with all exposure limits, including carcinogenic and pathogenic dusts.

5.1 Unintended use

This design is not suitable for exhausting processing machines.

Installation and operation in **dust explosive zones** or **gas explosive zones** is not permitted.

6. Technical data and description

6.1 EUROSOG-W (AC current devices)

We reserve the right to make technical changes.

Model (see model plate)		**-W/N**	**-W/M**	**-W/H**
Item No.		**80,198**	**80,399**	**80,299**
Max. airflow volume	[m³/h]	360		
Connection diameter	[mm]	50		
Max. vacuum	[Pa]	18,600		
Connection voltage	[V]	230		
Drive output	[kW]	3 x 1		
Rated current	[A]	13		
Nominal frequency	[Hz]	50		
Circuit breaker	[A]	16		
Protection class		IP 40		
Max. Sound pressure level*	[dB(A)]	74		
Environmental conditions	[°C]	$5 \leq \vartheta \leq 25$		
Max. air humidity	[%]	60		
Filter area, dust class “M”	[m²]	2	2	2
Filter area, dust class “H”	[m²]	-	-	5
Dust collection container	[litres]	80		
Dimensions	[mm]	920 x 655 x 1230		
Weight	[kg]	74		76
Production year		See model plate.		

* * using the enveloping surface method DIN EN ISO 3744, measured at minimum volume flow; noise measurement margin of error approx. 4 dBA

6.2 EUROSOG-I-D (three-phase current devices)

We reserve the right to make technical changes.

Model (see model plate)		**-I-D/N**	**-I-D/M**	**-I-D/H**
Item No.		**81,198**	**81,399**	**81,299**
Max. airflow volume	[m³/h]	260		
Connection diameter	[mm]	50		
Max. vacuum	[Pa]	19,500		
Connection voltage	[V]	400		
Nominal frequency	[Hz]	50		
Drive output	[kW]	2.2		
Rated current	[A]	4.6		
Circuit breaker	[A]	16		
Protection class		IP 40		
Environmental conditions	[°C]	$5 \leq \vartheta \leq 25$		
Max. Sound pressure level*	[dB(A)]	72		
Max. air humidity	[%]	60		
Filter area, dust class “M”	[m²]	2	2	2
Filter area, dust class “H”	[m²]	-	-	5
Dust collection container	[litres]	80		
Dimensions	[mm]	1050 x 670 x 1240		
Weight	[kg]	81		83
Production year		See model plate.		

* * using the enveloping surface method DIN EN ISO 3744, measured at minimum volume flow; noise measurement margin of error approx. 4 dBA

6.3 Functional description

AC operation: EUROSOG-W

The EUROSOG-W is equipped with three turbines, each driven directly by universal engines. The all-pole main switch supplies or cuts off the necessary power to the device, and the motors are turned on and off sequentially with the three green toggle switches.

Based on the vacuum created by the turbine, air is sucked through the intake fitting on the filter housing or through a suction piece connected to the intake fitting. A permanent **"M"** filter set up within the filter housing separates the dust that is in the exhausted air. The purified air is guided back into the room through the exhaust vents.

A crank on the filter housing is used for cleaning the filter. The crank drives a brush strip that runs over the filter folds and in this way removes dust clogged into the folds. The removed dust is caught in the dust collection container.

For removal of the collected dust material, the upper part can be tipped backwards and the dust collection container removed from the device complete with its contents.

Category **"H"** devices with a test certificate have a backup filter in addition to the filter described above. It is this filter that allows the device to comply with dust class **"H"**. It cannot be cleaned, so when necessary it must be replaced.

On tested devices of dust classes "M" and "H", there is a manometer built into the cover that displays the vacuum behind the filter.
With increased dust soiling of the filter, the flow resistance increases along with the vacuum behind the filter. If the manometer's indicator enters the red zone, the EUROSOG's suction performance is no longer adequate and the filter must be cleaned.

Operation with three-phase current:

The **EUROSOG-I-D** works in the same way but is equipped with a 3kW three-phase asynchronous motor that is turned on and off by an all-pole main switch.
The motor uses a poly-V belt to drive the suction turbine.

7. Delivery and commissioning

7.1 Delivery

At delivery, the EUROSOG is fastened to a pallet. After the protective cover and the bottom fasteners have been removed, the device can be picked up with a forklift. Please do not use a crane.

Upon delivery, please inspect the device for transportation damage. Damage determined must be reported and documented immediately.

Never use a crane for transport!

ESTA customer service: +49 (0) 7307 804 - 0

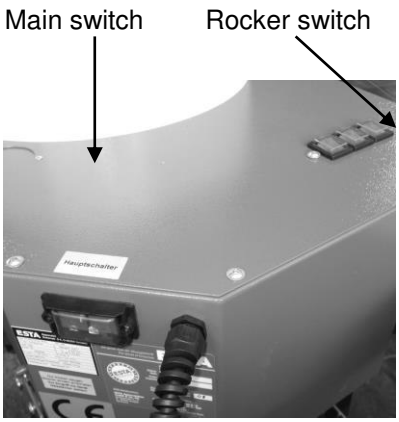
When moving the device, make sure the ground can support it and be driven over.

7.2 Commissioning

Only persons authorized under “General safety instructions” must turn the device on.
Before setting up the cable connection between the device and the power grid, check to make sure the operating voltage shown on the model plate is the same as that of the grid.

Before the device is used, its operation must be tested.

7.2.1 EUROSOG-W (for AC operation, all variants)



The equipment for turning the device on and off is on the side of the turbine housing. Pressing the main switch's green button supplies the device with power, and the red button shuts it off. The device has three green rocker switches. Each turbine is turned on individually by its own rocker switch. Each rocker switch lights when its turbine is turned on.
If all rocker three switches are at the **"I"** position and the device has been wrongly turned on at the main switch, in adverse situations the fuse to the power grid can be tripped. It is recommended that the turbines be turned on **individually and sequentially** using the green rocker switches. To run the device as intended, all turbines must be turned on.

7.2.2 EUROSOG-I-D (for operation with three-phase current)

The equipment for turning the device on and off is located on the cover of the turbine housing. The device is turned on and off with the black rotary switch.

Be aware of the direction of rotation!

Before commissioning, make sure that the turbine's direction of rotation is correct. Meanwhile, also look at the red light on the switch. If this lights up after the device is turned on, the direction of rotation is wrong, and the power supply's polarity must be reversed. For this purpose, the CEE plug is equipped with a phase inverter. Using a screwdriver to turn the pole pin built into the insulated part of the plug changes the motor's direction of rotation.

When the direction of rotation is wrong, the device gets impermissibly hot, the airflow volume gets weaker, and the device's performance suffers. This can also damage the device.

7.3 Operation

If a function check is performed, the correct ESTA suction accessory parts must be connected to the intake fitting for commissioning the EUROSOG. This consists of a suction hose, a handheld tube and a nozzle. The end of the suction hose, which is reinforced with a coil spring, is inserted into the intake port of the industrial vacuum. The other end is connected to the sleeve of the handheld tube or a hand-guided suction nozzle. For cleaning the floor, connect the handheld tube to the floor vacuuming attachment. The EUROSOG is now ready to operate.

8. Maintenance and troubleshooting

8.1 Maintenance instructions

For maintenance by qualified personnel, the device must be opened, cleaned and inspected at the given locations, as well as possible, without any hazard being posed to maintenance personnel or other persons. Proper precautions must be taken before cleaning and removal of wearing parts. This includes locally filtered forced-air ventilation in the area in which the device is being maintained, and proper personal protective gear. This consists of a dust mask with a class P3 particle filter, protective clothing (e.g. an appropriate disposable safety suit) and safety gloves.

All distractions by uninvolved persons and the environment must be prevented.

During maintenance or repair work, all soiled objects that can no longer be adequately cleaned must be disposed of. Such objects must be disposed of in impermeable dust bags in compliance with applicable regulations for disposal of such refuse.

If the EUROSOG is not needed in its location of use for a long time, it must be stored in a dry room. The temperature should not be below 5°C or above 25°C.
It is best to clean the device before storing it. To do this, clean the filter and empty the dust collection container. Then the device must be thoroughly cleaned with a suitable industrial vacuum cleaner. Optionally, the device can also be cleaned with a damp cloth.

The device must never be cleaned with flowing water.

Service, maintenance and cleaning must be performed according to accident prevention regulations. Before this work is performed, the device must be switched off and disconnected from the power grid! Pull the electrical plug!

8.2 Inspection and maintenance intervals

§

The operator is obligated to have a technical inspection performed once per year. This involves a specially trained person checking the entire device for correct operation. It includes checking the filter for damage, the airtightness of the device, and correct operation of the control module. Additionally, for dust class H devices, the device's filtration effectiveness should be checked at least annually, as can be determined by national requirements. The inspection process that can be used for certifying the device's effectiveness is specified in DIN EN 60335-2-69 AA.22.201.2. If the device does not pass this test, it must be repeated with a new main filter.

Regular maintenance consists of 3 intervals:

1. Daily inspection includes:

➢ ***By the device's user***

Visual inspection

- for damage to the device or its parts,
- for mechanical damage to the power cable,
- for a full dust collection container (regulations require that the container be emptied if it is more than 2/3 full).

2. Monthly inspection includes:

➢ ***By expert maintenance personnel***

Functional and visual inspection

- for filter leaks (dust trails or deposits on the air outlets),
- when available, to guarantee operation of the minimum airflow volume monitor (manometer or pressure controller). During inspection, the device's air intake must be closed.

3. The main annual inspection includes:

The last test by ESTA is documented on the device.

➢ ***In collaboration with the ESTA maintenance service***

- Flow volume measurement
- Vacuum measurement
- Current consumption measurement
- Visual check of filters
- Seal inspection

After maintenance, the device receives a new test plate as documentation.

In the included maintenance book, records must be kept of the service and maintenance work, and of the main annual inspection. This must make clear the equipment inspected and, if necessary, the deficiencies found, along with the name of the inspector and the date of the inspection. The date of the next main inspection can be read from the inspection plate installed on the device.
If there is a malfunction, the industrial vacuum must be switched off immediately and the responsible maintenance service notified!

Maintenance must be performed according to accident prevention regulations. The device must be disconnected from the power supply!

According to work equipment user directives 2009/104/EG and TRGS 560, safety devices for prevention or removal of hazards must be regularly maintained and regularly inspected by an expert for safe, flawless operation.

Get the most from ESTA's maintenance service!

A maintenance contract ensures a long life and top-notch operation for your industrial vacuum.

We'll make you a great offer — just call us up:

ESTA maintenance service: +49 (0) 7307 804 - 0
ESTA replacement part service: +49 (0) 7307 804 - 0

8.3 Troubleshooting

Always use the following checklists if a malfunction is evident. Call the ESTA maintenance service right away if there is a malfunction that is not discussed in these lists. Do not perform any repairs on the device yourself if they are not explicitly specified.

Problem	Possible cause	Possible solution
Device shuts off	The motor protection relay has been tripped due to low voltage, overload or wrong direction of rotation	Voltage too low Clean filter Change the connection polarity Allow to cool for 30 min.
Suction performance diminishes / or no suction	Filter clogged Suction hose clogged	Clean filter Clean the exhaust hose in an environmentally sound manner
Warning signal for low suction volume persists despite filter cleaning.	Fine dust is sucked right back to the filter. Dust collection container too full Filter pores clogged in main filter	Clean several times with device at rest and let the dust settle (1 min.) Replace dust bag Replace filter

If dust escapes or clouds up from the air outlets, if smoke develops or the suction assembly runs loud, the device must be switched off immediately!

Before opening the switch box, make sure to pull the electrical plug! Work in the switch box must be performed only by an electrical expert or an appropriately trained person.

9. Monitoring the minimum airflow volume

On tested devices of dust classes **"M"** and **"H"**, a manometer monitors the minimum airflow volume. The filter must be cleaned when the manometer's needle is in the red zone after the nozzle has been withdrawn.

If the vacuum indicator is in the red zone during commissioning and the siren sounds, the suction resistance in the suction hose is too high to reach the minimum airflow volume. In this case, the device cannot be used as intended!

10. Cleaning

The people assigned to cleaning work must be instructed on the aspirated toxic materials and wear a breathing protection mask with a class P3 particle filter, as well as protective clothing (such as a suitable disposable protective suit) and safety gloves. All distractions by uninvolved persons and the environment must be prevented.



During cleaning work, all soiled objects that can no longer be adequately cleaned must be disposed of. Such objects must be disposed of in impermeable bags in compliance with applicable regulations for disposal of such refuse.

Before the device is removed from a hazardous area, the device's exterior must be decontaminated through a dust extraction process using a suitable industrial vacuum cleaner. It is recommended that the device be wiped with a damp cloth or treated with a sealing agent. The device must never be cleaned with flowing water. All machine parts must be considered contaminated when they are removed from the hazardous area. Adequate measures must be taken to ensure that dust does not spread.

It is forbidden to blow the device or machine parts out with compressed air, or to sweep them with a broom!!!

When the device's suction performance diminishes and after every use, clean the filter unit.
Depending on the equipment, the need for cleaning is shown by a manometer or a warning signal.

10.1 Cleaning the EUROSOG's filter manually

If the filter is to be cleaned, wait about one minute after turning off the device, to allow the suction assembly to come to a standstill. During cleaning, the intake fitting must be closed and the power connection locked. For cleaning the filter, turn the hand crank on the filter part about 60 times rightward and then 60 times leftward. The cleaning process should take about two minutes (1 minute per rotation direction) and must be repeated three times.
This process should be performed even before a long downtime.
If fine dust is being exhausted, the filter needs to be cleaned more often.

After cleaning and start-up of the device, if the manometer's needle is still inside the red zone, the amount of material in the dust collection device must be checked. For this you must wait about one minute after cleaning so that the removed dust can settle. If necessary, empty the container.

If the suction performance doesn't improve after cleaning and emptying, replace the pre-filter or the main filter, depending on the model.

10.2 Filter replacement

Filter replacement must be performed in a well-ventilated room. The people assigned to this must be instructed on the aspirated toxic materials and wear a breathing protection mask with a class P3 particle filter, as well as protective clothing (such as a suitable disposable protective suit) and safety gloves. All distractions by uninvolved persons must be prevented.

After an extended operation period, the filter pores can be clogged by extremely fine dust. Even the cleaning equipment cannot remove this dust. The filter affected must then be replaced with a new one.

If possible, filter replacement must be done when there is no work going on. Used filters must be discarded in compliance with local regulations.

Before the filter is replaced, it must first be cleared of loose dust using the available cleaning system, and the power must be cut off.

10.2.1 Replacing the pre-filter (dust class "**M**")

Remove the crank from the cleaning device in order to loosen the threaded fastening pin. Now the crank can be pulled out. After that, loosen the clamping ring that holds the cover plate and remove the cover plate.
Pull a dust collection bag over the filter housing.
The filter housing will now tilt backwards when the locking bolt is pulled.
On the underside of the filter part, 6 fastening nuts are visible; remove them. Now the used filter can be pulled out of the upper part while being pulled upward against the cleaning shaft. In this way, the dust collection bag turns over the entire filter, so that no dangerous dust enters the environment. Close the dust collection bag with the supplied band so that no dust can escape. After that, clean the inside of the dust collection container and the filter housing with a moist, disposable cloth, or thoroughly vacuum it with a suitable industrial vacuum cleaner.
Install the new filter cartridge with the integrated cleaning equipment by performing the same process in reverse. Additionally, the filter cartridge must be sealed at the upper side with sealing compound.

10.2.2 Replacing the main filter (devices with the dust class **"H"** test certificate)

The backup filter is in the housing, inserted loosely around the main filter cartridge, and when the cover plate is removed, it can be taken out. It must be put into a dust collection bag.
The backup filter must be changed together with the main filter.

When installing the new "H" filter cartridge, make absolutely sure that the filter does not become damaged, since otherwise the filtration efficiency can no longer be reached.

Before installing a new filter, clean the filter housing, especially the sealing surface, with an industrial or glass cleaner.
Stubborn remains can also be removed with a scraper.

Cleaning the filter cartridge in a dismantled state by blowing it out or beating it is not permissible. After the backup filter has been removed, it must no longer be used and must be disposed of according to local regulations!

10.3 Replacement parts

EUROSOG / Replacement parts	W/N 80,198	I-D/N 81,198	W/H 80,299	I-D/H 81,299	W/M 80,399	I-D/M 81,399
Filter cartridge, complete* (pre-filter)	30000444	30000444	30001579	30001579	30000448	30000448
Filter cartridge, single** (pre-filter)	01000057	01000057	01000239	01000239	01000039	01000039
Filter cassette (Main filter)			01000235	01000235		
Dust collection bag (set)	30000588 Order No.: 91.015 (=10 x 06000357)					

* Filter cartridge with cleaning mechanism.
** Filter cartridge only, without cleaning mechanism.

With the device model information, request the replacement parts and accessories you need from the ESTA replacement part service:
+49 (0) 7307 804 - 0

11.Disposal

The people assigned to disposal must be instructed on the extracted toxic materials and wear a breathing protection mask with a class P3 particle filter, as well as protective clothing (such as a suitable disposable protective suit) and safety gloves. All distractions by uninvolved persons must be prevented.



11.1 Disposing of the collected dust material

After using the dust extractor, always replace the dust collection bag when it has reached the container's maximum fill height, which is identical with the lower edge of the score in the dust collection container and must always be replaced with a new one after using the industrial vacuum.

Since the ESTA company does not know what types of dust are being exhausted, it can be necessary to replace the dust collection bag before it has reached its maximum fill level (a large bulk density means heavy weight).

Before replacing the dust collection bag, lock the castors and pull off the suction hose.

Locating pin

To remove the full dust collection bag, tilt the upper part of the device in the direction of the turbine housing while removing the locating pin on the side. The locating pin rests back in when the upper part has been fully tilted.
Now turn the device on. To remove the dust collection bag, pull it carefully upwards, press it together, and close it with the included band. Finally, remove the dust collection bag from the container, and dispose of it in accordance with local regulations.

Using the handle, the dust collection container can also be complete removed along with the locked dust bag.
When inserting a new dust collection bag, make sure that as few creases as possible lie against the upper edge. The device should be turned back on only when its upper part has been snapped shut (remove the locating pin) and the suction hose has been inserted. This is the only way to ensure that during disposal no dust passes from the filter to the environment. The device is now ready to operate again.

11.2 Disposing of the device

Before disposing of the device, empty the dust collection container, remove the filters, and dispose of all of them in compliance with local regulations.

Pack the device in a suitable manner and dispose of it in compliance with local regulations.

Due to contamination of the device with toxic dust, ESTA cannot take the device back.

12. Optional equipment

12.1 Movable dust collection container

To make transporting a heavy load of dust easier, special equipment for the dust collection container includes two rollers and two push handles.
After the dust collection container is unhitched from the filter housing, lock the dust collection bag.
Then pull both grey push handles together. The dust collection container releases itself from its side locking mechanism in the chassis. Slowly pulling further on the handles slides the container from the base plate to the floor. Now it can be easily rolled to the disposal location.
After disposal, insert a new dust collection bag.
To hitch the container, roll it to the device and lean it so that the edge of the base plate (the chassis of the vacuum) stops in the middle of the container base. Pressing the container's handles toward the device slides the dust collection container on the base plate and rests it in the notches on the side walls of the chassis.
The vacuum should not be turned on until after the dust collection container has been hitched up. This is the only way to ensure that during disposal no dust passes from the filter to the environment.

12.2 Pre-separator

The EUROSOG can be equipped with an upstream separator. This collects large amounts of coarse dust, in order to prolong the life of the filter cartridge. It is available in various sizes.
The pre-separator is also an ideal addition for moving fluid-laden or very light materials.

Model	Included in delivery	Vessel size	Application
TR 1	Dolly, vessel with plastic bag insert, pre-deposition head with connection to suction assembly, dia. 50	100 litres	**Dry** heavy, coarse suction material and large amounts of dust
TR 2		200 litres	
NA 1	Dolly, vessel with screen basket, pre-deposition head with float clasp and connection to suction assembly, dia. 50	100 litres	**Wet** fluid-laden material (metal abrasions, shavings, etc.); liquid can be drained
NA 2		200 litres	
ST 1	Dolly, vessel with side connection ports, spacer and filter bag that accepts disposable filters, connection to the suction assembly, dia. 50	100 litres	**Lightweight material** large amounts of light material, mainly dust
ST 2		200 litres	

ESTA customer service: +49 (0) 7307 804 - 0

12.3 Accessories

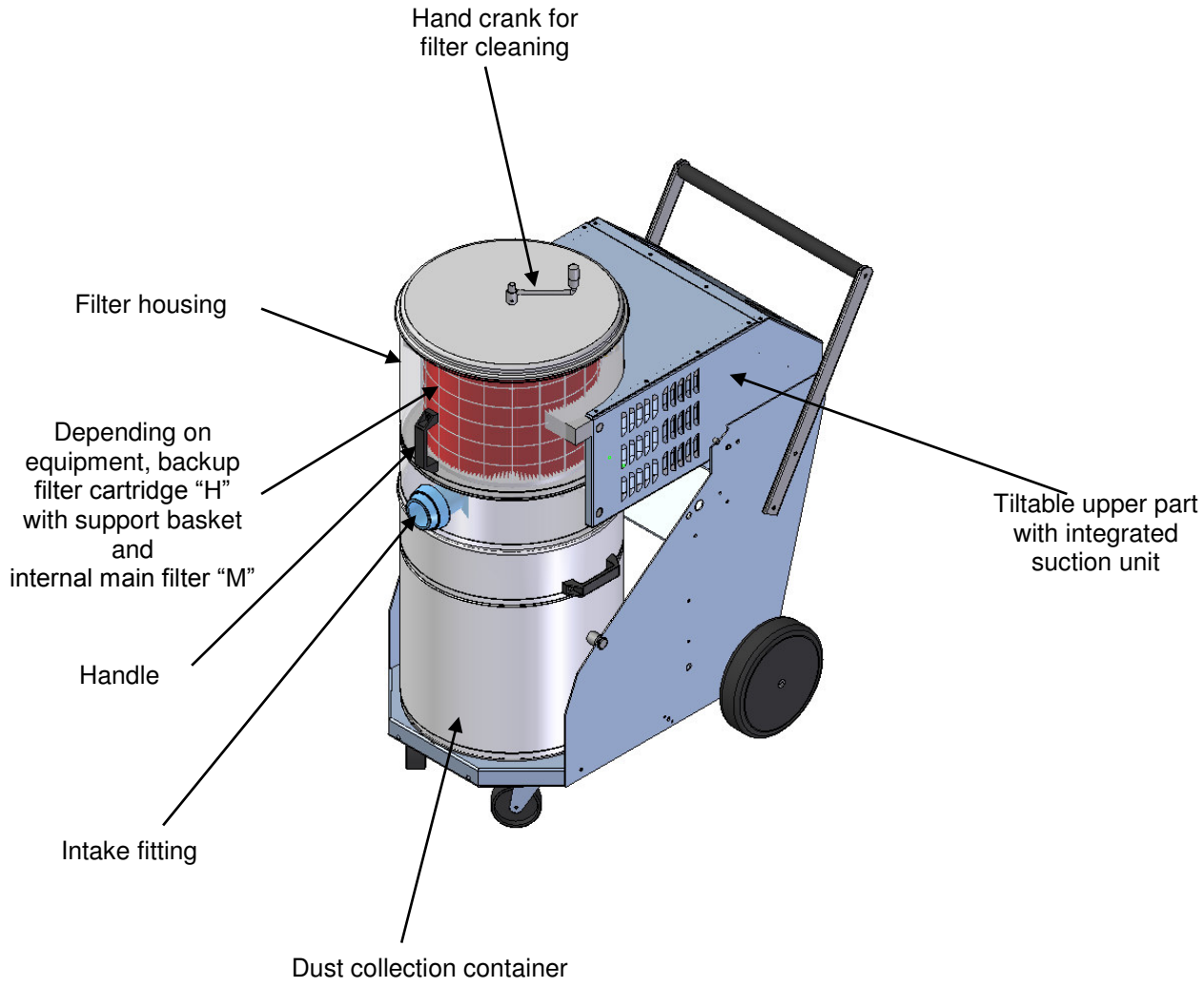
EUROSOG / Accessories	W/N 80,198	D/N 81,198	W/H 80,299	I-D/H 81,299	W/M 80,399	I-D/M 81,399
Suction hose, ø50 with connecting sleeve; can be driven over	5001					
Special floor nozzle ø50mm 500mm wide height adjustable floor roller	6008					
Guide tube Ø50mm; 1.2m long; curved aluminium; with nozzle cone	5013					

With the model information, request the replacement parts and accessories you need from the ESTA replacement part service: +49 (0) 7307 804 - 0

13. Device diagram

EUROSOG

The depiction may vary from the actual model.



With the model information, request the replacement parts you need from the ESTA replacement part service: +49 (0) 7307 804 - 0

13.1 Instructions and symbols

When opening and closing, pull the locating pin.

Instructions for pulling the lateral locating pin that keeps the upper part of the device locked in open or closed position.

Main switch

Indication that this is the main switch.

Vacuum only when dry. Turn the motors on individually.
Pull the electrical plug before working on the device.

Indication that the device is intended only for dry cleaning of coarse, fine and free-flowing dusts. It must not be used or stored outdoors or under wet conditions. Never extract moist dusts.
When starting the device, the motors must be switched on individually, one after the other. When working inside the device (such as for service, repair or maintenance), first the device absolutely must be turned off at the main switch and the electrical plug disconnected.

Only for devices with three-phase current!

When the direction of rotation is wrong, the signal lamp lights up. Please reverse the electrical plug's polarity immediately.

Instructions on incorrect rotating field. Immediately turn the device back off, pull the electrical plug, and reverse the plug's polarity. For this purpose, the CEE plug is equipped with a phase inverter. Using a screwdriver to turn the pole pin built into the insulated part of the plug changes the motor's direction of rotation.

The power cable and plug must be worked on only by an electrical specialist or a person trained for the task.

14. EC-/EU-Declaration of Conformity

Name of manufacturer:	ESTA Apparatebau GmbH & Co. KG
Address of manufacturer:	Gotenstraße 2 - 6 89250 Senden
Person in charge of Documentation:	ESTA Apparatebau GmbH & Co. KG Gotenstraße 2 - 6 89250 Senden

We hereby declare that the design of the machine

Machine:	Industrial exhaust for suction and separation of settled dust.
Series:	EUROSOG
Model:	**EUROSOG - W/N; I-D/N; W/M; I-D/M; W/H; I-D/H**

conforms to the following regulations:

2006/42/EC	EC Machine Directive
2014/30/EU	EU Electromagnetic Compatibility Directive

Reconciled norms used:

DIN EN ISO 12100:2011-03	Safety of Machinery – Basic concepts, general principles for design
DIN EN ISO 13857:2008-06	Safety of Machinery – Safety distances to prevent danger zones from being reached by upper and lower limbs
DIN EN 349:2008-09	Safety of machinery – Minimum distances for preventing body parts from being crushed
DIN EN 60335-1:2012-10	Safety of electrical appliances for household and similar use – general requirements
DIN EN 60335-2-69:2012-08	Safety of electrical appliances for household and similar use – Special requirements for dust and water suction systems including power brushes for commercial use
DIN EN 61000-6-3:2011-09	EMC - Generic standards - Emission standard for residential, commercial and light-industrial environments
DIN EN 61000-6-4:2011-09	EMC generic standard – Interference for industrial environments
DIN EN 61000-3-11:2001-04	EMC limits – Limitation of voltage changes, voltage fluctuations and flickers in low-voltage public supply systems; devices and equipment with a rated current ≤75A that are subject to special connection conditions¬¬

National norms and technical specifications used:

VDI 3677	Filtering separators
DIN 8416	Dust extractors for commercial use
TRBS 2153	Prevention of ignition hazards due to electrostatic charges

Senden, 23.08.2016

Dr. Peter Kulitz
CEO

Notes

ESTA Apparatebau GmbH & Co. KG
Gotenstraße 2 - 6
89250 Senden / Ay

Tel.: +49 (0) 7307 804 - 0
Fax: +49 (0) 7307 804 - 500
E-mail: info@esta.com

www.esta.com

ESTA Apparatebau GmbH & Co. KG
Gotenstraße 2 - 6
89250 Senden / Ay

Tel.: +49 (0) 7307 804 - 0
Fax: +49 (0) 7307 804 - 500
E-mail: info@esta.com

www.esta.com

ESTA-FAX: **+49 (0) 73 07 - 80 45 00**

ORDER FORM

I want to order the following items:

Amount	Order-No.	Item description

My address:

Customer-No.:

Company:

Address:

Contact person:

Phone:

Fax:

E-mail:

Signature:

www.esta.com

ESTA Extraction Technology

- Mobile Extractors
- Stationary Dust Extractors
- Industrial Vacuum Cleaners
- Welding Fume Filters
- Oil Mist Separators
- Extraction Fans
- Extraction Arms
- Central Extraction Systems
- Pipe Systems

ESTA Apparatebau GmbH & Co. KG
Gotenstrasse 2 – 6
D-89250 Senden, Germany

Phone: +49 (0) 73 07 - 8 04 - 0
Fax: +49 (0) 73 07 - 8 04 - 500
E-Mail: info@esta.com
www.esta.com

www.esta.com